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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,959	10/02/2003	Sung Uk Moon	243447US90	5899

22850 7590 02/07/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VO, NGUYEN THANH

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/675,959

Applicant(s)

MOON ET AL.

Examiner

Nguyen T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5 and 6 is/are rejected.
- 7) ☒ Claim(s) 2 and 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhu (US 7,043,210 B2, cited by examiner).

As to claim 1, Zhu discloses a signal receiving device (see the receiving device in figure 7) for receiving data hierarchized by a signal transmitting device (see the transmitting device in figure 6), the signal receiving device comprising a layer identifying unit configured to identify data layers transmitted from the signal transmitting device (see column 5 line 46 to column 6 line 19); and a hierarchized data receiving unit configured to select at least one of the identified data layers according to a criteria including at least one of a receiving buffer size of the signal receiving device, calculating capability of the signal receiving device, and a propagating environment characteristic of the signal receiving device, and to receive the selected data layers (see column 3 lines 14-34; column 5 lines 35-39; column 6 lines 8-19).

As to claim 3, Zhu discloses a signal transmitting device for hierarchizing data to be transmitted and transmitting the hierarchized data (see the transmitting device in

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figure 6), the signal transmitting device comprising a hierarchized data transmitting unit configured to hierarchize the data to be transmitted into a plurality of layers (see numerals 46) according to at least one of a number of multiplexed codes in CDMA (Code Division Multiple Access), a coding unit of error correction codes 44 (see column 5 lines 22-38), and an information block number, and to transmit the hierarchized data (see antenna 28).

As to claim 5, the rejections to claims 1 and 3 as set forth above is herein incorporated.

As to claim 6, the rejections to claims 1 and 3 as set forth above is herein incorporated. In addition, Zhu further discloses dividing data as claimed (see packets 1-N in figure 6).

Allowable Subject Matter

3. Claims 2, 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 2, the applied references fail to disclose or render obvious a selection unit configured to select one or more of the receiving buffer size of the signal receiving device, the calculating capability of the signal receiving device, and the propagating environment of the signal receiving device, for selecting the identified data layers, as specified in the claim.

As to claim 4, the applied references fail to disclose or render obvious comprising a selection unit configured to select at least one of the number of multiplexed codes,

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the coding unit of error correction codes, and the information block number, for dividing the data to be transmitted into a plurality of layers, as specified in the claim.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Petrus (US 2004/0063406 A1); Moon (US 2004/0066844 A1) disclose hierarchical modulation.

Alslan (US 2002/0172166 A1) discloses selecting demodulations at a receiver.

Tanaka (US 6,490,243 B1) discloses selecting decoding schemes at a receiver.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Vo whose telephone number is (571) 272-7901. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nguyen Vo

Nguyen Vo
1-31-2007

NGUYENT.VO
PRIMARY EXAMINER